

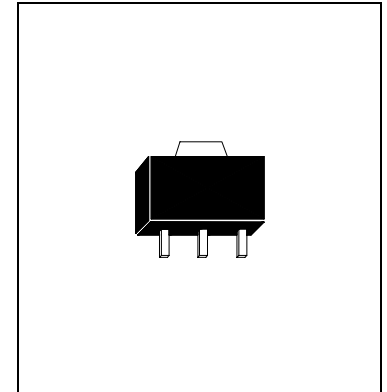


HM772A

PNP EPITAXIAL PLANAR TRANSISTOR

Description

The HM772A is designed for use in output stage of amplifier, voltage regulator, DC-DC converter and driver.



Absolute Maximum Ratings

- Maximum Temperatures
 - Storage Temperature -55 ~ +150 °C
 - Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 - Total Power Dissipation (Ta=25°C) 1 W (Note1)
 - Total Power Dissipation (Ta=25°C)..... 2 W (Note2)
 - Total Power Dissipation (Ta=25°C)..... 1.5 W (Note3)
- Maximum Voltages and Currents (Ta=25°C)
 - V_{CB0} Collector to Base Voltage -60 V
 - V_{CEO} Collector to Emitter Voltage -50 V
 - V_{EB0} Emitter to Base Voltage -5 V
 - I_C Collector Current (continuous) -3 A
 - I_C Collector Current (pulse) -7 A (Note4)

Note1: When tested in free air condition, without heat sinking.

Note2: When mounted on a 40X40X1mm ceramic board.

Note3: Printed circuit board 2mm thick, collector plating 1cm square or larger.

Note4: Single pulse PW=1ms

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
B _V C _{B0}	-60	-	-	V	I _C =-100uA
B _V C _{E0}	-50	-	-	V	I _C =-1mA
B _V E _{B0}	-5	-	-	V	I _E =-10uA
I _C B ₀	-	-	-1	uA	V _{CB} =-30V
I _E B ₀	-	-	-1	uA	V _{EB} =-3V
*V _{CE} (sat)	-	-0.3	-0.5	V	I _C =-2A, I _B =-0.2A
*V _{BE} (sat)	-	-1	-2	V	I _C =-2A, I _B =-0.2A
*h _{FE1}	30	-	-		V _{CE} =-2V, I _C =-20mA
*h _{FE2}	100	160	500		V _{CE} =-2V, I _C =-1A
f _T	-	80	-	MHz	V _{CE} =-5V, I _C =-100mA, f=100MHz
C _{ob}	-	55	-	pF	V _{CB} =-10V, f=1MHz

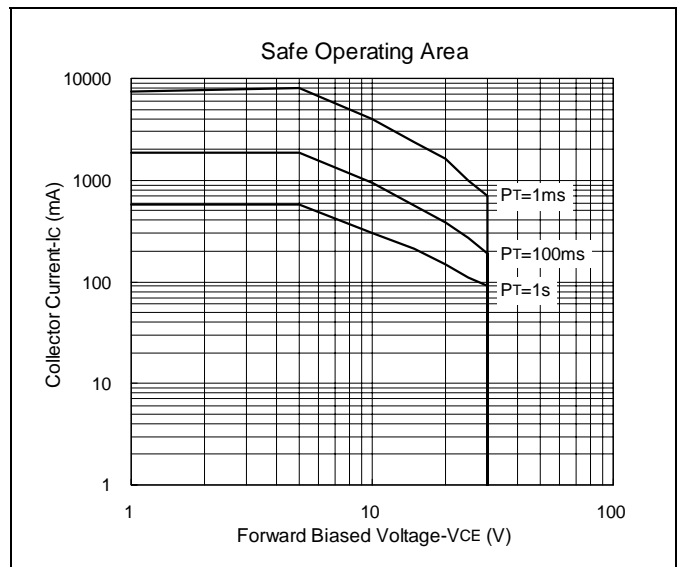
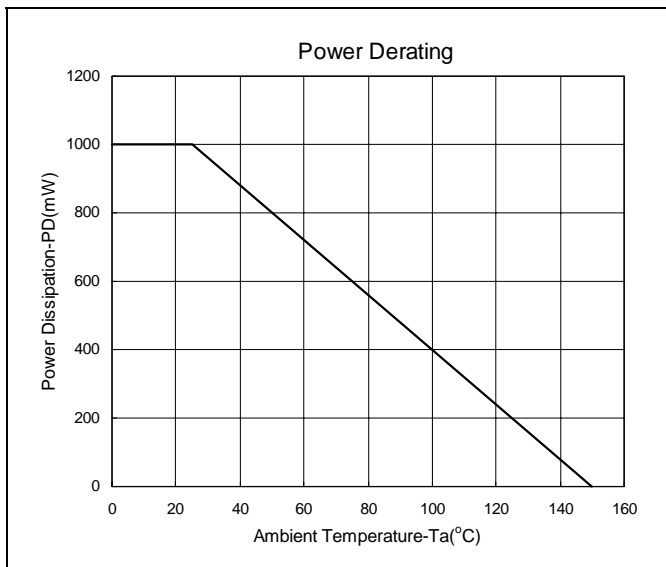
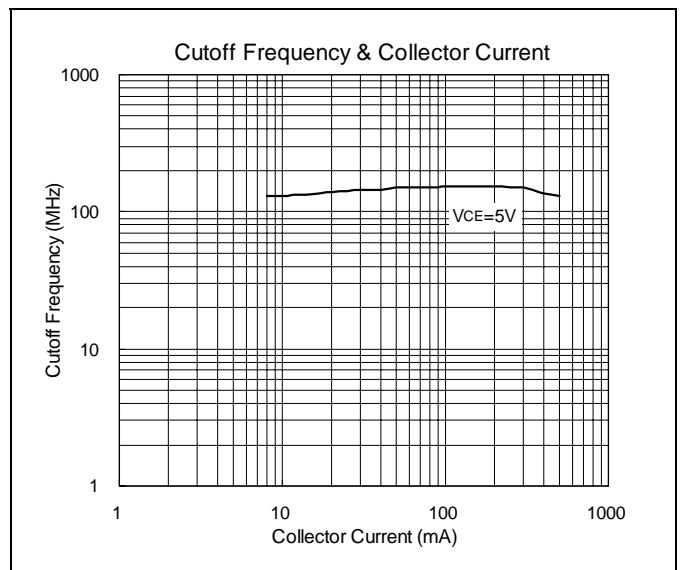
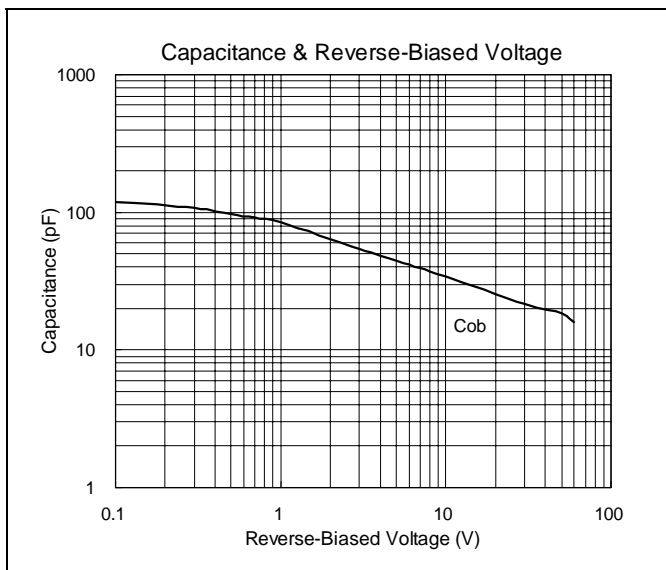
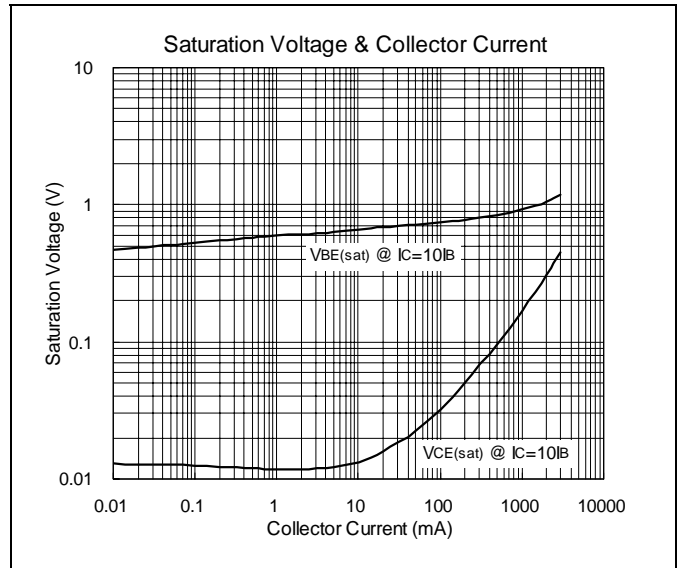
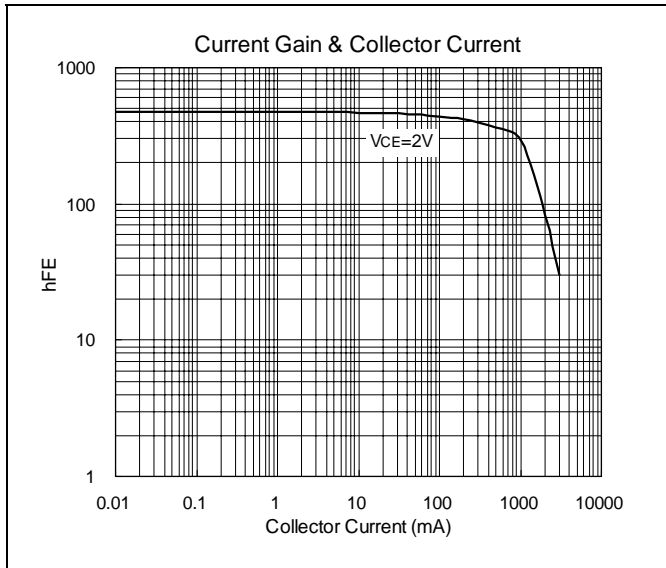
*Pulse Test : Pulse Width ≤380us, Duty Cycle≤2%

Classification Of h_{FE2}

Rank	Q	P	E
Range	100-200	160-320	250-500

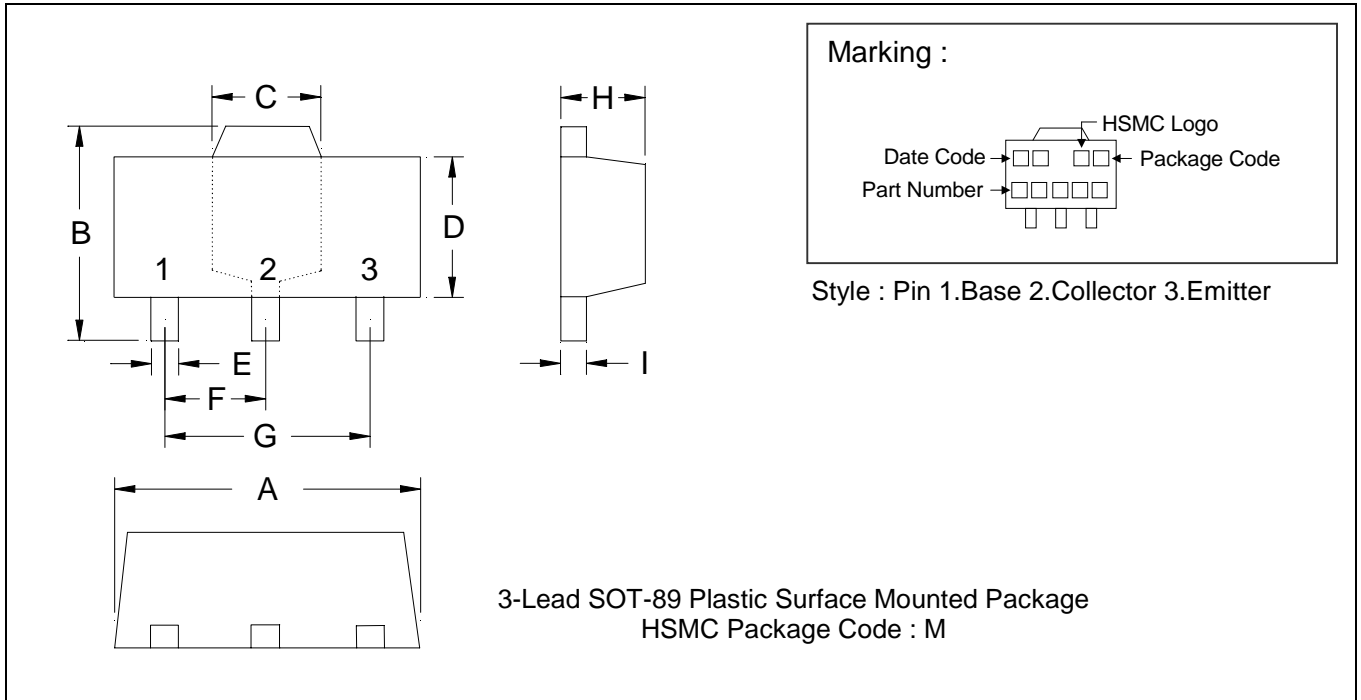


Characteristics Curve





SOT-89 Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0583	0.0598	1.48	1.52
B	0.1594	0.1673	4.05	4.25	G	0.1165	0.1197	2.96	3.04
C	0.0591	0.0663	1.50	1.70	H	0.0551	0.0630	1.40	1.60
D	0.0945	0.1024	2.40	2.60	I	0.0138	0.0161	0.35	0.41
E	0.0141	0.0201	0.36	0.51					

- Notes :
- 1.Dimension and tolerance based on our Spec. dated May. 05,1996.
 - 2.Controlling dimension : millimeters.
 - 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 - 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material :

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

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